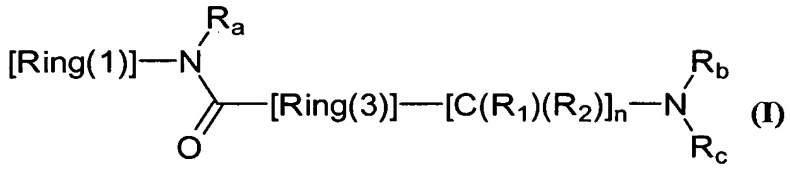
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. – 31. (Cancelled)

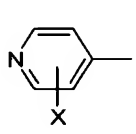
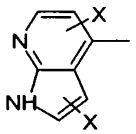
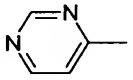
32. (New) A compound according to formula I:



(I)

wherein

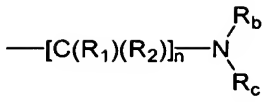
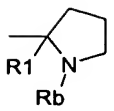
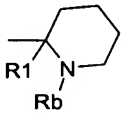
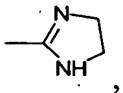
n is 1;

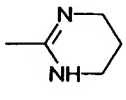
Ring(1) is of formula  ,  , or 

wherein -X may be absent or denotes substitution with 1-4 substituents X that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl and a substituted or unsubstituted amino group;

Ring(3) is a 1,3-phenylene, 1,4-phenylene, 1,3-cyclohexylene, or 1,4-cyclohexylene optionally substituted with 1-4 substituents that are independently selected from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl, an amino group;

R_a is hydrogen; a linear or branched, optionally substituted C_1-C_6-alkyl; a linear or branched, optionally substituted C_1-C_6-alkoxy; or an optionally substituted aryl;

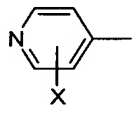
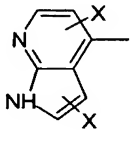
 represents a group selected from    ,

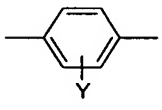
and  ; and

R_1 is selected from the group consisting of hydrogen; a substituted or unsubstituted, saturated, unsaturated or aromatic 3-, 4-, 5-, 6-, 7-or 8-membered ring containing carbon atoms and optionally one or two heteroatoms; substituted or unsubstituted C_1-C_6 alkyl and cyano,

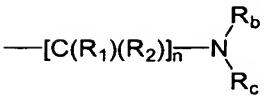
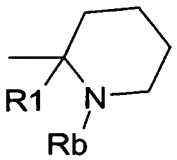
or a salt, pharmaceutically acceptable salt, pharmaceutically acceptable prodrug, tautomer, isomer, and/or stereochemical isomer thereof.

33. (New) The compound according to claim 32, wherein

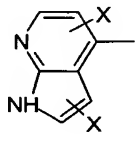
Ring(1) is of formula  or  ;

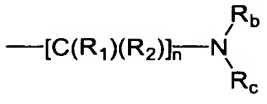
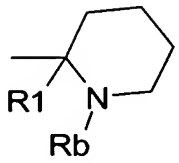
Ring(3) is of formula  ,

wherein -Y may be absent or denotes substitution with 1-4 substituents Y that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl, and an amino group; and

 represents a group that is  or  .

34. (New) The compound according to claim 33, wherein

Ring(1) is of formula  ; and

 represents a group that is  .

35. (New) The compound according to claim 34, wherein X denotes substitution with 1 or 2 substituents X.

36. (New) The compound according to claim 35, wherein -Y denotes substitution with 1 or 2 substituents Y.

37. (New) A compound selected from the group consisting of

N-pyridin-4-yl-4-pyrrolidin-2-yl-benzamide;

4-piperidin-2-yl-N-pyridin-4-yl-benzamide;

1,2,3,4-tetrahydro-isoquinoline-6-carboxylic acid pyridin-4-yl-amide;

4-(4,5-dihydro-1H-imidazol-2-yl)-N-pyridin-4-yl-benzamide;

N-pyridin-4-yl-4-(1,4,5,6-tetrahydro-1H-pyrimidin-2-yl)-benzamide;

4-(1-amino-phenyl-methyl)-N- pyridin-4-yl-benzamide;

4-[l-amino- (4-fluorophenyl)-methyl]-N-pyridin-4-yl-benzamide;

4-[1-amino-(4-methoxyphenyl)-methyl]-N-pyridin-4-yl-benzamide;

4-(1-amino-ethyl)-naphthalene-1-carboxylic acid pyridin-4-ylamide;

4-aminomethyl-2,5-dimethyl-N-pyridin-4-yl-benzamide;

4-(1-amino-ethyl)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-benzamide;

4-(1-amino-cyclopentyl-ethyl)-N-(1H-pyrrolo [2,3-b] pyridin-4-yl)- benzamide;

1,2,3,4-tetrahydro-isoquinoline-6-carboxylicacid-N (1H pyrrolo [2,3-b] pyridin-4-yl)-benzamide;

4-piperidin-2-yl-N-(1H-pyrrolo [2,3-b]pyridin-4-yl)- benzamide;

4-(1-amino-cyclobutyl-ethyl)-N-pyridin-4-yl-benzamide;

4-(l-amino-2,2-dimethyl-butyl)-N-pyridin-4-yl-benzamide;

1-amino-indan-5-carboxylic acid pyridin-4-yl-amide;

4-(1-amino-butyl)-N-pyridin-4-yl-benzamide;

4-(1-amino-pentyl)-N-pyridin-4-yl-benzamide;

4-(1-amino-2-methyl-propyl)-N-pyridin-4-yl-benzamide;

4-(1-amino-2, 2-dimethyl-propyl)-N-pyridin-4-yl-benzamide;

4-(1-amino-propyl)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-benzamide;

4-(1-amino-cyclopropyl-ethyl)-N(1H-pyrrolo[2,3-b]pyridin-4-yl)-benzamide;

4-(1-amino-cyclobutyl-ethyl)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-benzamide;

4-(1-amino-2,2-dimethyl-butyl)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-benzamide;

1-amino-indan-5-carboxylic acid(1H-pyrrolo[2,3-b]pyridin-4-yl)-amide;

5-amino-5,6,7,8-tetrahydro-naphthalene-2-carboxylic acid (1H-pyrrolo[2,3-b]pyridin-4-yl)-amide;

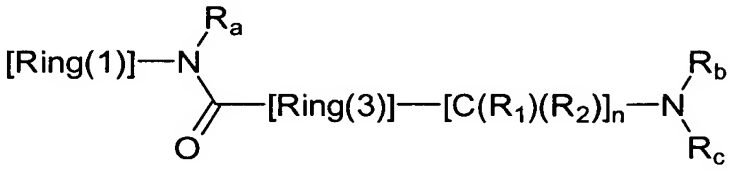
4-(1-amino-butyl)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)-benzamide;

4- (1-amino-2,2-dimethyl-propyl)-N-(1H-pyrrolo[2,3-b] pyridin-4-yl)-benzamide; and

or salt, pharmaceutically acceptable salt, pharmaceutically acceptable prodrug, tautomer, isomer, and/or stereochemical isomer thereof.

38. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound according to claim 32 and a pharmaceutically acceptable carrier, diluent, excipient, and/or adjuvant.

39. (New) A method for the treatment or prevention of a metabolic disease or disorder, or complications and/or symptoms thereof, in a mammal, comprising administering to the mammal a therapeutically effective amount of a compound according to the following formula, or a salt or prodrug thereof:



wherein

Ring(1) is a substituted or unsubstituted, saturated, unsaturated or aromatic 4-, 5-, 6-, 7-, or 8-membered ring containing carbon atoms and at least one hydrogen-accepting heteroatom and optionally 1 or 2 further heteroatoms;

R_a is a hydrogen or a linear or branched, substituted or unsubstituted C_1-C_6 alkyl, substituted or unsubstituted C_1-C_6 alkoxy or substituted or unsubstituted aryl;

Ring(3) is a substituted or unsubstituted, saturated, unsaturated or aromatic 4-, 5-, 6-, 7-, or 8-membered ring containing carbon atoms and optionally 1 or 2 further heteroatoms;

each R_1 or R_2 may be the same or different and is independently selected from the group consisting of hydrogen, a substituted or unsubstituted, saturated, unsaturated or aromatic 3-, 4-, 5-, 6-, 7-or 8-membered ring containing carbon atoms and optionally one or two heteroatoms, substituted or unsubstituted C_1-C_6 alkyl or cyano;

n is 0, 1, or 2; and

R_b and R_c are such that the amino group $-NR_bR_c$ is essentially in a protonated form at a pH between 5.0-9.0;

and wherein

(1) the group R_a, the nitrogen atom to which group R_a is bound, the carbon atom of Ring(1) to which the N-R_a nitrogen atom is bound, and one carbon atom of Ring(1) adjacent to the carbon atom of Ring(1) to which the N-R_a nitrogen atom is bound may form Ring(7) wherein Ring(7) is a substituted or unsubstituted, saturated, unsaturated or aromatic 4-, 5-, or 6-membered ring that contains carbon atoms, the N-R_a nitrogen atom and optionally one further heteroatom chose from oxygen, sulfur, and nitrogen;

(2) where Ring(3) is a 1,4-phenylene group, one of R_1 and R_2, the carbon atom to which R_1 and R_2 are bound and two of the carbon atoms belonging to the 1,4-phenylene group may form a substituted or unsubstituted 5-, 6-, 7-, or 8-membered ring that contains carbon atoms, the nitrogen atom of the amino group NR_bR_c and optionally one further heteroatom chosen from oxygen, sulfur, and nitrogen and that may be saturated or contain one double bond;

(3) where Ring(3) is a 1,4-phenylene group, one of R_b or R_c, the nitrogen atom to which R_b or R_c are bound, the carbon atom to which R_1 or R_2 are bound and two of the carbon atoms belonging to the 1,4-phenylene group may form a substituted or unsubstituted 5-, 6-, 7-, or 8-membered ring that contains carbon atoms, the nitrogen atom of the amino group NR_bR_c and optionally one further heteroatom chosen from oxygen, sulfur, and nitrogen and that may be saturated or contain one double bond;

(4) one of R_b and R_c may, together with the nitrogen atom of the amino group NR_bR_c, one of R_1 and R_2 and the carbon atom to which R_1 and R_2 are bound, form a substituted or unsubstituted 5-, 6-, 7-, or 8-membered ring that contains carbon atoms, the nitrogen atom of the amino group NR_bR_c and optionally one further heteroatom chosen from oxygen, sulfur, and nitrogen and that may be saturated or contain one double bond;

(5) R_b, R_c and the nitrogen atom to which they are bound may together form a substituted or unsubstituted ring with between 3 and 10 atoms in the ring, including the nitrogen atom to which both R_a and R_b are bound, so that the ring so formed consists of a nitrogen atom, carbon atoms and optionally one further heteroatom chose from oxygen, nitrogen, and sulfur;

and wherein

the distance between the at least one hydrogen-accepting heteroatom in Ring(1) and the NR_aR_b nitrogen atom, as determined using a Scatter Plot, is in the range of 11.0 to 11.8 Angstroms.

40. (New) The method according to claim 39, wherein the disease or disorder is selected from the group consisting of hyperglycemia, hyperinsulinemia, hyperlipidemia, and insulin-resistant diabetes, lipoatrophies, and obesity.

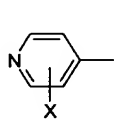
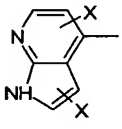
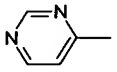
41. (New) The method according to claim 39, wherein the disease or disorder is selected from the group consisting of conditions and/or diseases that are primarily associated with the response or sensitivity to insulin,

42. (New) The method according to claim 39, wherein the disease or disorder is selected from the group consisting of Type I and Type II diabetes, severe insulin resistance, Mendenhall's Syndrome, Werner Syndrome, leprechaunism, lipoatrophic diabetes, hypertension, osteoporosis and lipodystrophy.

43. (New) The method according to claim 39, wherein the disease or disorder is Type II diabetes, or a complication or symptom associated therewith.

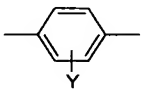
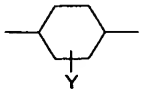
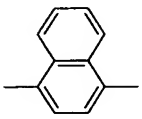
44. (New) The method according to claim 39, wherein the disease or disorder is obesity, or a complication or symptom associated therewith.

45. (New) The method according to claim 39, wherein

Ring (1) is of formula  ,  , or 

wherein -X may be absent or denotes substitution with 1-4 substituents X that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl and a substituted or unsubstituted amino group,

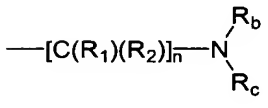
R_a is a hydrogen;

Ring (3) is of formula  ,  , or  ,

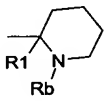
wherein-Y may be absent or denotes substitution with 1-4 substituents Y that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl and an amino group,

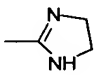
each R_1 or R_2, may be the same or different, and is independently selected from the group consisting of hydrogen, a substituted or unsubstituted, saturated, unsaturated or aromatic 3-, 4-, 5-, 6-, 7-or 8-membered ring containing carbon atoms and optionally one or two heteroatoms, substituted or unsubstituted C_1-C_6 alkyl or cyano; n is 1; and R_b and R_c are each independently hydrogen;

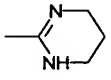
or



is of formula 

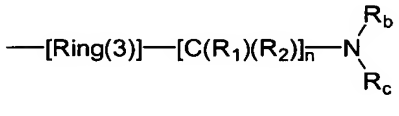


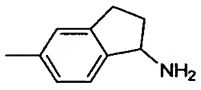
, 

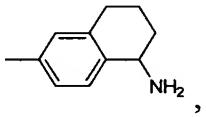
, or 

;

or wherein:



is of formula 

, 

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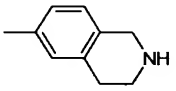
or 

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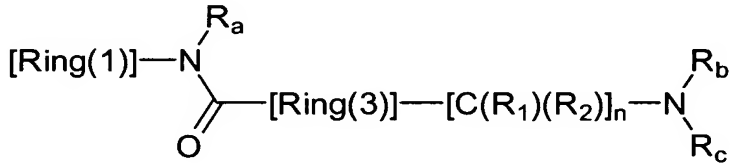
46. (New) A method for inhibition of the activity of at least one kinase, comprising contacting said kinase with a compound according to the following formula, or a salt or prodrug thereof:



wherein

Ring(1) is a substituted or unsubstituted, saturated, unsaturated or aromatic 4-, 5-, 6-, 7-, or 8-membered ring containing carbon atoms and at least one hydrogen-accepting heteroatom and optionally 1 or 2 further heteroatoms;

R_a is a hydrogen or a linear or branched, substituted or unsubstituted C_1-C_6 alkyl, substituted or unsubstituted C_1-C_6 alkoxy or substituted or unsubstituted aryl;

Ring(3) is a substituted or unsubstituted, saturated, unsaturated or aromatic 4-, 5-, 6-, 7-, or 8-membered ring containing carbon atoms and optionally 1 or 2 further heteroatoms;

each R_1 or R_2 may be the same or different and is independently selected from the group consisting of hydrogen, a substituted or unsubstituted, saturated, unsaturated or aromatic 3-, 4-, 5-, 6-, 7-or 8-membered ring containing carbon atoms and optionally one or two heteroatoms, substituted or unsubstituted C_1-C_6 alkyl or cyano;

n is 0, 1, or 2; and

R_b and R_c are such that the amino group $-NR_bR_c$ is essentially in a protonated form at a pH between 5.0-9.0;

and wherein

(1) the group R_a, the nitrogen atom to which group R_a is bound, the carbon atom of Ring(1) to which the N-R_a nitrogen atom is bound, and one carbon atom of Ring(1) adjacent to the carbon atom of Ring(1) to which the N-R_a nitrogen atom is bound may form Ring(7) wherein Ring(7) is a substituted or unsubstituted, saturated, unsaturated or aromatic 4-, 5-, or 6-membered ring that contains carbon atoms, the N-R_a nitrogen atom and optionally one further heteroatom chose from oxygen, sulfur, and nitrogen;

(2) where Ring(3) is a 1,4-phenylene group, one of R_1 and R_2, the carbon atom to which R_1 and R_2 are bound and two of the carbon atoms belonging to the 1,4-phenylene group may form a substituted or unsubstituted 5-, 6-, 7-, or 8-membered ring that contains carbon atoms, the nitrogen atom of the amino group NR_bR_c and optionally one further heteroatom chosen from oxygen, sulfur, and nitrogen and that may be saturated or contain one double bond;

(3) where Ring(3) is a 1,4-phenylene group, one of R_b or R_c, the nitrogen atom to which R_b or R_c are bound, the carbon atom to which R_1 or R_2 are bound and two of the carbon atoms belonging to the 1,4-phenylene group may form a substituted or unsubstituted 5-, 6-, 7-, or 8-membered ring that contains carbon atoms, the nitrogen atom of the amino group NR_bR_c and optionally one further heteroatom chosen from oxygen, sulfur, and nitrogen and that may be saturated or contain one double bond;

(4) one of R_b and R_c may, together with the nitrogen atom of the amino group NR_bR_c, one of R_1 and R_2 and the carbon atom to which R_1 and R_2 are bound, form a substituted or unsubstituted 5-, 6-, 7-, or 8-membered ring that contains carbon atoms, the nitrogen atom of the amino group NR_bR_c and optionally one further heteroatom chosen from oxygen, sulfur, and nitrogen and that may be saturated or contain one double bond;

(5) R_b, R_c and the nitrogen atom to which they are bound may together form a substituted or unsubstituted ring with between 3 and 10 atoms in the ring, including the nitrogen atom to which both R_a and R_b are bound, so that the ring so formed consists of a nitrogen atom, carbon atoms and optionally one further heteroatom chose from oxygen, nitrogen, and sulfur;

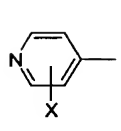
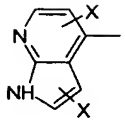
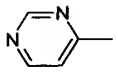
and wherein

the distance between the at least one hydrogen-accepting heteroatom in Ring(1) and the NR_aR_b nitrogen atom, as determined using a Scatter Plot, is in the range of 11.0 to 11.8 Angstroms..

47. (New) The method according to claim 46, wherein the inhibition is *in vivo*.

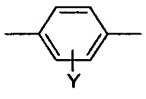
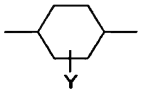
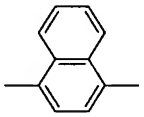
48. (New) The method according to claim 46, wherein the inhibition is *in vitro*.

49. (New) The method according to claim 46, wherein

Ring (1) is of formula  ,  , or 

wherein -X may be absent or denotes substitution with 1-4 substituents X that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl and a substituted or unsubstituted amino group,

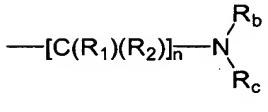
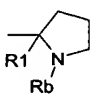
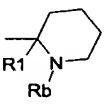
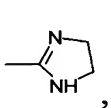
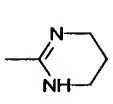
R_a is a hydrogen;

Ring (3) is of formula  ,  , or  ,

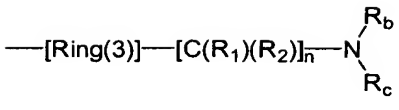
wherein-Y may be absent or denotes substitution with 1-4 substituents Y that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl and an amino group,

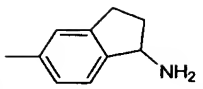
each R_1 or R_2, may be the same or different, and is independently selected from the group consisting of hydrogen, a substituted or unsubstituted, saturated, unsaturated or aromatic 3-, 4-, 5-, 6-, 7-or 8-membered ring containing carbon atoms and optionally one or two heteroatoms, substituted or unsubstituted C_1-C_6 alkyl or cyano; n is 1; and R_b and R_c are each independently hydrogen;

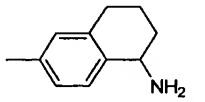
or

 is of formula   ,  , or  ;

or wherein:



is of formula 

, 

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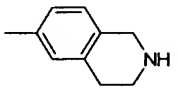
or 

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